Graduation Rates and Long-Term Suspension Recovery Programs

By

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Submitted to the graduate degree program in Educational Leadership and Policy Studies and the Graduate Faculty of the University of Kansas in partial fulfillment of the requirement for the degree of Doctor of Education.

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Date Defended: 24 April 2019

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Date Approved: 24 April 2019

## Abstract

This study used student suspension data from one suburban and one rural school district in Missouri to describe the relationship between participation in long-term suspension credit-recovery programs and graduation rates of those same suspended students. Students who participated in a long-term suspension credit recovery program were 8.8 times more likely to graduate than students who served a long-term out of school suspension. The study used Chi-Square analysis to assess the correlation between graduation and variables that included: gender, race, free/reduced lunch status, 10$^{th}$ grade reading proficiency, participation in a long-term suspension credit recovery program, and the duration of the suspensions. A binary logistical regression was then used to analyze the likelihood of graduation with each of the same variables taken into account. The findings suggested that when a student participated in a long-term suspension credit recovery program, he/she was 8.8 times more likely to graduate than a student who was suspended out of school. The findings also suggested that students who were assessed as proficient on state standardized testing in the 10$^{th}$ grade were 3.3 time more likely to graduate if they had been suspended long-term than students who were not reading proficiently. Finally, the findings suggested that students suspended for a duration of 180 days were 30 percent less likely to graduate than students suspended for 45 days. These findings are consistent with existing research regarding zero-tolerance policies, the ineffectiveness of exclusionary suspensions, and school climate as a contributing factor to exclusionary suspension. The research provides empirical evidence in support of the recommendation to investigate, develop, and implement long-term-suspension credit-recovery programs as an alternative to long-term out of school suspensions.

Acknowledgements

I dedicate this dissertation to my father, Stephen D. Coffman, for his support, encouragement, and unyielding optimism. I would also like to thank my mother, Jeanette V. Coffman, for her pragmatism and motivation when times were tough.

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## Chapter 1: Introduction

With this study I sought to understand the relationship between long-term suspension and high school student likelihood to persist through graduation. Many researchers have investigated out of school suspensions regarding suspension bias against students belonging to racial minorities, and those researchers often concluded that suspensions are biased, ineffective in their goal to deter misbehavior, and exacerbates already severe racial disparities in school disciplinary outcomes. (Hoffman, 2014; Mendez, 2003; Skiba, 2014a; Townsend, 2000; Wilson, 2014). Other research on school suspensions suggests that school climate and zero-tolerance policies have increased the number of out of school suspensions, which has a strong correlation to an increase in dropout rates, at-risk behaviors, and decreased academic performance. (American Academy of Pediatrics Committee on School Health, 2003; Arcia, 2006; Hemphill, 2006; Kupchik, 2015; Lamont, 2015; Morrison & Anthony, 2001; Wilson, 2014). According to Nicholaus Freudenberg (2007) high school graduation is a predictor of a person's good health and he recommends state health officials reframe student dropout rates as a health issue for their communites. Baring this in mind, long-term out of school suspension (those between 11-180 days) are often mandated by school board policies or state law. Once a school distrtict administrator has assigned a student to long-term out of school suspension, many other school district policies come into play that prevent a student from the ability to graduate on time. I set aside the question of whether a suspension is good or bad and instead looked at participation in long-term suspension credit recover programs that allowed exclusionary suspensions (i.e., out of school suspensions) and offered a way for students to earn high school credit. I designed my study to investigate programs intended to help students gain credit even when on long-term

suspension, to understand the likelihood of graduation for students who participated in a long-term suspension recovery program.

**Statement of the Problem**

In Missouri, school districts have been faced with the hard proposition of suspending students for more than 10 days when those students have committed serious, sometimes felonious, offenses against other students, teachers, or the good order of the school (Kraetzer, 2002). According to the Missouri Safe Schools Act, in these cases, school administrators have often been required by district policy or law to suspend a student out of school for a period of 11 to 180 days (Mo. Rev. Stat. 167.161.171, 2000). Even a short suspension of less than 20 days has been shown to have negative consequences related to high school students' chances to graduate on time (American Academy of Pediatrics Committee on School Health, 2003; Arcia, 2006; Hemphill, 2006; Kupchik, 2015; Lamont, 2015; Morrison & Anthony, 2001; Wilson, 2014).

Once a student is suspended for a long-term out of school, a number of school policies come into play that decrease the likelihood of graduation. To understand the gravity of the situation a suspended student encounters as a result of a long-term out of school suspension, one must understand the policies that effect the likelihood of graduation. These policies include graduating with a cohort, the number of credits needed for graduation, the required courses needed for graduation, the district's attendance policy, and if the incident violated the Missouri Safe Schools Act.

The foundation for these policies is the cohort system and the units of credit necessary for graduation. Upon entrance into the 9$^{th}$ grade students are placed in the a cohort, along with all other freshmen in Missouri. The Department of Elementary and Secondary Education assigns

students to this cohort to measure graduation and dropout rates in Missouri. Students are expected to graduate after completing their fourth year of high school fulfilling all credits and required courses. If a student does not graduate with his/her cohort, the school district has to report that student as a dropout on their annual report to the state. This dropout rate is part of accreditation for the school district, and can be accessed by the public to hold school district officials accountable. This does not actually mean that the student has dropped out of school. The student has the right to continue high school until they graduate or "age out" at 21 years of age.

In Missouri, the minimum number of credits to graduate is 24. School districts can, and often do, exceed the number of credits, but 24 credits are required for all school districts. Putting this into context, in schools that offer seven class periods per day, students have the ability to earn 28 credits in their four years of high school. A student suspended for 45 days will lose all credits for the semester in which they are suspended, which is three and a half credits. This means that this student cannot lose one more credit or fail a class, or they will not graduate with their cohort. The student is then reported to the state as a dropout from the school district. Students also have to pass required courses and exams, in order to graduate with their cohort. In most school districts these courses include: four credits of Communication Arts, three credits of Math, three credits of Science, two credits of Social Studies including Government (along with passing the required United States Constitution and Missouri Constitution tests), one credit of Physical Education, one credit of Practical Arts, one credit of Performing Arts, a half credit of Health, and a half credit of Personal Finance. If the student is missing any of these credits at the time of his/her cohort graduation, then he/she does not graduate with the cohort and is considered a dropout for state recording by the school district. Most of these courses can be made up in

summer school, or in some cases on-line, but the effect of this policy has a large impact on long-term suspended students.

Most school districts in Missouri have a credit denial policy in their student handbook that is used to encourage student attendance. These policies deny credit to students who miss more than ten days of school in the semester. There are exceptions to this policy for students who have had an illness or accident that precludes them from coming to school. However, suspensions are not exceptions to this policy. According to the student handbooks of the two districts involved in this study, students who miss more than 10 days due to suspension have had their credits denied, even if they were passing classes at the time of suspension. It is important to understand that many suspensions occur close to the end of one semester. For example, a student who is suspended on November 20th for 45 days for a under the influence of drugs/alcohol offense in District 1 for this study, would be denied all credits for first semester, which would take up twenty days of the semester. They would still have to serve twenty-five more days of out of school suspension second semester, which would deny them credit even if they returned to school after the suspension was fulfilled. In this example, the student has lost seven credits due to one offense, placing them a year behind his/her cohort.

Finally, some offenses are so grievous (ie. murder, rape, sexual assault, kidnapping, distribution of drugs) that the Missouri Safe Schools Act requires school district administrators to report the offense to law enforcement and children's division and to suspend the student out of school for no less than one year, or expulsion. The superintendent of the school district is allowed to modify this suspension on a case by case basis to align with the school districts discipline policies. (Mo. Rev. Stat. 160.261, 2017). In addition to the reporting mandate of the Missouri Safe Schools Act, it also requires school districts to honor the suspensions mete out to

students from other school districts. This stipulation makes the transfer of a suspended student from the suspending school district to avoid serving the suspension difficult. All discipline records are sent with the enrolling student and if they are under suspension in the sending school district the receiving school district will enforce the suspension.

It is within this system of school board policy and state law that school district administrators have to find the balance between holding students accountable for their actions, practicing compassion and empathy for all parties affected by the infraction, and being held accountable by community and state standards. School district administrators must follow their board policies and state statutes when disciplining students, however, students receiving exclusionary (i.e., out-of-school) suspensions have been put at risk of dropping out of school by these suspensions (American Academy of Pediatrics Committee on School Health, 2003; Arcia, 2006; Hemphill, 2006; Kupchik, 2015; Lamont, 2015; Morrison & Anthony, 2001; Wilson, 2014).

To address these concerns, school districts have been implementing long-term-suspension credit-recovery (LTS-CR) programs that support the academic and social growth and well-being of long-term suspended students (Freudenberg, 2007). One such program, offered by District 1 in this study, is staffed by certified teachers and serves as an off-campus school and support center for suspended students during the regular school day. Students' academic classes are either moved to an online credit-earning class—for longer suspensions—or conducted virtually with the scheduled class teacher—for suspensions lasting only a few weeks. Social workers and counselors, along with outside agencies, give students counselling fitting their offenses. The district also puts a transition program in place to move a student back into classes at the end of the suspension.

The problem that districts have faced in implementing LTS-CR programs has been one of resources and return on investment. LTS-CR programs require facilities, transportation, staffing, and technology that may appear prohibitively costly. The purpose behind these programs has been to address both student academic progress and social maladjustment so that the student will graduate while gaining the skills to prevent future risk of incarceration and criminal activity (Freudenberg, 2007).

If a school district has a low graduation rate or a high dropout rate, coupled with a high suspension rate, finding a cost-effective long-term suspension credit recovery program could benefit the district on accreditation status, and more importantly, bolster graduation rates for students. With this in mind, the following questions are important to examine within this study. Does an LTS-CR program relate to the likelihood of student graduation? To what extent does a student's participation in an LTS-CR program serve as a predictor of the student's graduation from high school? Once districts have addressed these questions, they can weigh the potential effectiveness and benefits of implementing an LTS-CR program.

**Purpose of the Study**

School districts administrators face tough decisions in suspending students out of school for a long-term suspension. The decision to suspend a student can have long-lasting negative effects, especially if that student forgoes graduating from high school (Freudenberg, 2007). In speaking with area superintendents and school board members I learned they were looking for information on the benefit of long-term suspension credit recovery programs in order to justify their costs. The focus of this study is the relationship between placing students in an LTS-CR program and the likelihood of graduation among long-term suspended students? It should also be noted that school district administrators are concerned with research of Mendez (2003) and

Skiba (2014a) indicating racial bias in out-of-school suspensions. They concluded that because there was bias toward suspending non-white students more that White students, out-of-school suspensions were unfair and should not be used in a school district. These researchers also concluded that there were real detriments to student achievement and graduation from suspensions (Mendez, 2003; Skiba, 2014a; Hoffman, 2014). The disproportionality of suspensions based on racial bias was a clear conclusion in the research by Mendez, Skiba, and Hoffman. I wanted to test to see if gender, race, and socioeconomic status were disproportionate in suburban and rural settings, as well as, there was a different outcome of participation in an LTS-CR program for female, non-white, or socioeconomically disadvantaged students.

I compared data from two school districts, a suburban school district with an LTS-CR program and a rural school district without. The purpose of comparing these districts was to describe how LTS-CR programs relate to the likelihood of graduation among long-term suspended students. I sought correlations between graduation rates of long-term suspended students and their enrollment in LTS-CR programs. I also sought correlations between other factors like: race, gender, free/reduced lunch status, reading proficiency, duration of the offense, and type of offense. School districts are unlikely to ever stop suspending students, at least for criminal behavior. This study may help school districts ameliorate the effects of long-term suspensions by describing how LTS-CR programs are associated with increased likelihood for graduation after long-term suspension.

**Research Questions**

The purpose behind this study was to identify and describe the factors that relate to graduation for long-term suspended students. The following research questions were explored:

(1) How does participation in a long-term suspension program relate to the likelihood of graduation for students who are suspended from school for over 10 days?

(2) What factors relate to students' likelihood of graduation who are suspended from school for over 10 days? Factors include:

a) High school attended
b) Participation in long-term suspension credit recovery program
c) 10th grade reading proficiency
d) Gender
e) Race / ethnicity (i.e., White vs Non-white)
f) Eligibility for free or reduced lunch
g) Type of offense (e.g., drugs / alcohol, violence, sexual activity)
h) Duration of the suspension

**Definitions**

*Exclusionary suspension* (out-of-school suspension) is any suspension that is an administrative assigned disciplinary consequence. A student serving exclusionary suspension is not be allowed on school property or to attend school activities during the suspension.

*Long-term exclusionary suspension* or *long-term out-of-school suspension* is a period during which a student is removed from school by the superintendent or the superintendent's designee that exceeds 10 school days but does not exceed 180 school days.

*Dropout rate* is the percentage of students who do not graduate with their cohort relative to the number of students in the cohort.

*Cohort* describes the group of students who begin ninth grade in the same year and are expected to graduate together after 4 years of high school.

*Long-term-suspension credit-recovery program describes a* program instituted by a school district adminstrators to house and educate students serving long-term suspensions students, who are then housed at an off-campus location. In many cases, this would be in the district's administrative offices.

*Zero tolerance* is a school policy whereby rules are enforced based on a strict reading of the student handbook rules and district or state policies.

# Chapter 2: Review of the Literature

## Introduction

School leaders have been forced to decipher conflicting information regarding the negative effects of suspensions on student academic performance and well-being and regulations imposed by school boards and state agencies that are intended to keep schools safe from violence, drugs, bullying, and harassment. On one hand, many researchers investigating the effectiveness of school suspensions have indicated a strong correlation between out-of-school or long-term suspensions and at-risk behaviors, the dropout rate, and decreased academic performance (American Academy of Pediatrics Committee on School Health, 2003; Arcia, 2006; Hemphill, 2006; Kupchik, 2015; Lamont, 2015; Morrison & Anthony, 2001; Wilson, 2014). Others have looked at the culture and climate inside the school building and found that schools in which teachers were viewed as incompetent in solving their own problems and schools with centralized administrative policies had higher rates of exclusionary suspensions (Gregory, 2009; Hemphill, 2014). According to these studies, empowering teachers and staff to handle discipline issues and the socioeconomic factors that students were burdened with when they walked through the school doors decreased the number of exclusionary suspensions (Dupper, 2009; Gregory, 2009; Hargreaves, 2009; Hemphill, 2014; Morris, 2003). These institutional factors, when coupled with suspensions, may worsen rather than improve student behavior in schools. Finally, researchers have shown the existence of an implicit gender and racial bias in the meting out of out-of-school and long-term suspensions by school administrators (Hoffman, 2014; Mendez, 2003; Skiba, 2014b; Townsend, 2000; Wilson, 2014).

It is within this framework that schools have had to balance a myriad of mandatory suspensions and disciplinary measures due to state or district policies. Schools have had to

suspend students for violence, drugs, harassment, or bullying. In some states, these suspensions have been mandatory, and students have not been permitted to serve them in the school. These zero-tolerance policies have created a paradox where, despite research showing that out-of-school suspensions negatively impact student academic success and behavior, school leaders have been required to implement the suspensions with limited interventions to help students make amends. In this environment, school leaders have had to decide between implementing zero-tolerance suspensions or implementing programs to address the culture and climate of their buildings and social–emotional attributes that are correlated to student misbehavior and disengagement with school.

## Literature on the Effectiveness of Exclusionary Suspensions.

**Effectiveness of exclusionary suspension.** Researchers investigating the use of out-of-school or exclusionary suspensions have provoked concern because they have shown that these suspensions have serious negative consequences that include academic and social–emotional problems for students who have been disciplined in this fashion (American Academy of Pediatrics Committee on School Health, 2003; Arcia, 2006; Hemphill, 2006; Mendez, 2003). Included in these adverse effects are serious negative academic consequences such as retention, academic failure (Arcia, 2006), loss of high school credit, less commitment to school (Costenbader, 1998), antisocial behavior (Gottfredson, Gottfredson, & Hybl, 1993), rebelliousness (Gottfredson et al., 1993), and an increase in the dropout rate (Mendez, 2003).

**School climate as a contributing factor toward exclusionary suspension.** Researchers have shown that school culture has often contributed to an increase in exclusionary suspensions. Teachers' attitudes, competence of teachers to deal with student issues, and a top-down administrative structure have led to environments in which teachers have not felt empowered to

handle student disruption or misbehavior in the classroom (Gregory, 2009). Rather, these issues have been referred to the office repeatedly, which in turn has led to an increase in exclusionary suspensions. According to Hemphill (2014), this erodes the fair and consistent distribution of disciplinary actions and increases the likelihood that students will be suspended more frequently and for longer periods of time.

**Implicit gender, racial and socioeconomic bias in exclusionary suspensions.** Mendez (2003) reported that school suspensions had been used with increasingly disproportionate frequency on students belonging to racial minorities and students from low-socioeconomic-status backgrounds. Skiba (2014b) reported that exclusionary suspensions, which were once reserved for serious offenses, have become commonplace and have been disproportionately used in response to day-to-day difficulties such as defiance and noncompliance—especially with male students and students belonging to racial minorities. Skiba (2014b) found that students of Black or Hispanic descent were overrepresented in school suspension rates and that these suspensions were not due to a difference in student behavior.

**Impact of zero-tolerance policies on exclusionary suspensions.** According to Skiba (2014a), there has been no data showing that out-of-school suspensions and expulsions reduce disruption or improve school climate. Zero tolerance has led to an increase in school suspensions, and in many school districts, the implementation of zero tolerance has caused what were once deemed minor offenses to become offenses worthy of exclusionary suspensions (Gregory, 2009).

## Gaps in the Literature

Existing research clearly pointed to a systemic problem with the idea behind exclusionary suspension (American Academy of Pediatrics Committee on School Health, 2003; Arcia, 2006;

Hemphill, 2006; Mendez, 2003). School administrators have clearly felt the need to exclude students for violent and antisocial behavior (Kraetzer, 2002). According to Kraetzer (2002), the idea behind exclusionary suspension in the Missouri Safe Schools Act, is that by excluding students who exhibit these behaviors, schools benefit the greater good, at the expense of the individual student. Even in the face of overwhelming research that contradicts the effectiveness of exclusionary suspensions, schools and districts have continued to mandate these suspensions without any real intervention in place to prevent recidivism (American Academy of Pediatrics Committee on School Health, 2003; Arcia, 2006; Hemphill, 2006; Mendez, 2003).

Several questions regarding school policies and practices are relevant to development of a program that can identify the causes of student behavior, give students the skills to alter and improve their relationships to school culture, ensure students stay on a path toward academic success during a suspension, and give schools the framework needed to set up nonexclusionary suspensions that serve the dual purpose of holding students accountable and serving their academic and social–emotional needs. These questions include: Is there a way to hold students accountable for misbehavior that may be exclusionary but continues to educate the child? Could such a program address academic and social–emotional well-being to deter dropouts, improve retention, or prevent future suspensions? Would such a program address the concerns espoused in much of the research on exclusionary suspensions?

**Contributions of this Study and Its Importance**

The contribution of this study is to bridge the gap between what researchers tell schools and how schools apply this knowledge to practice. It is impractical for schools to eliminate all exclusionary suspensions, especially when some are mandated by law (Kraetzer, 2002). However, schools should not ignore research. With a simple change in the way exclusionary

suspensions are put in place, schools could have exclusion from the building and continue to educate students and develop coping skills within them so that their return to school will increase their likelihood of graduation and lead to more student success and less disruption in the classroom.

This study focused on one strategy used to discipline students for major offenses. District 1 implemented the long-term-suspension credit-recovery (LTS-CR) program to effect change in students on long-term suspension for drugs, alcohol, harassment, bullying, violence, or a safe-schools violation. The objective of this program was to keep students in an educational setting with a teacher to continue their education and engagement with school. The program effectively eliminated all long-term suspensions that would be out of school and transferred the students into a small classroom setting with a teacher or teachers who could give small-group instruction and one-on-one guidance to students on long-term suspension. While in this program, the student was partnered with community resources, school counselors, and social workers to develop coping or life skills and strategies to address the behaviors that got the student on long-term suspension. This program included a comprehensive drug-and-alcohol-awareness curriculum sponsored by community health care services and utilized school resources to teach healthy relationships, anger management, and respect for others.

The LTS-CR program also served as credit recovery for students. Many of these students were behind on high school credits because of chronic absenteeism or disengagement in the regular classroom. Students who chose to take the LTS-CR program were afforded extra one-on-one tutoring in mathematics and were placed in online credit-recovery classes that helped them regain lost credit. Students were guaranteed seats in the online platform 24 hours a day, 7 days a week, and many found that they were able to catch up and surpass the number of credits

they needed to graduate with their cohort while they were in the LTS-CR program. District 1's policy was to "never throw a student away." District 1 treated this program as an intervention to prevent students from dropping out of school when faced with a major suspension.

District 2 did not have an LTS-CR program, which meant that all students suspended for more than 10 days were given an exclusionary suspension. They were barred from attending school or school activities and they did not continue with their coursework or credits. After serving their suspensions they could come back to school, often in the middle of a semester, when they had to catch up on all assignments and learning to pass the course.

I used long-term-suspension data to determine whether the LTS-CR program reduced the number of dropouts in District 2 compared to District 1. I designed the study to analyze a credible and replicable example of a practical way to reduce dropout rates among students who were given exclusionary suspensions. District 2 began its own LTS-CR program in January 2018. This will eventually provide additional data about the implementation and effectiveness of LTS-CR programs. Table 1 shows some of the possibilities and outcomes for students when offered an LTS-CR program or not having the option of this program.

**Summary**

In addressing the relationship between the likelihood of graduation and LTS-CR programs, it is critical for districts to attune their discipline strategies to the research that has shown the ineffectiveness and negative consequences of zero tolerance and exclusionary discipline (Skiba, 2014a). So many factors impact the implementation of exclusionary suspensions, including school culture, racial and gender bias, students' home environments, and the skills students have in dealing with social–emotional issues. If administrators are to be successful in eliminating

Table 1

*Model of Outcomes for Students Offered Long-Term-Suspension Credit Recovery or Not*

| Offered | Reason | Outcome |
|---|---|---|
| Yes | Possibility 1: If the treatment works students should be able to gain credits and graduate on time because they are allowed to continue their education in a separate setting while under suspension.<br>Possibility 2: Students already had enough credits to graduate prior to their suspension and therefore they are using the LTS-CR program to finish their current semester status and classes. | Graduate |
| Yes | Possibility 1: Student does not follow the rules in the LTS-CR program and is removed from the program, then does not return to school or loses credits and does not graduate with the cohort.<br>Possibility 2: Student does not get enough credits with the online or curricular part of the LTS-CR program.<br>Possibility 3: Student was already so far behind on credits that he or she could not catch up to the cohort.<br>Possibility 4: Student makes it through the LTS-CR program but is unsuccessful in continuing schooling later after suspension. | Drop out |
| Yes | Possibility 1: Student decides on private or homeschooling in order to avoid or work around the suspension.<br>Possibility 2: Student goes to live with another guardian or parent. | Transfer out |
| No | Possibility 1: Student has enough credits to graduate at the time of suspension.<br>Possibility 2: Student serves the suspension and returns to school through the normal course of graduation. | Graduate |
| No | Possibility 1: Student is on the roll but is either out-of-school suspended or has not yet returned to school. | Still enrolled |
| No | Possibility 1: Student did not gain enough credit in order to graduate on time with the cohort.<br>Possibility 2: Student has reached the age where compulsory education is no longer mandated, and the student decides to leave school rather than serve the suspension. | Drop out |
| No | Possibility 1: Student finds another school that will not impose the suspension.<br>Possibility 2: Student goes to live with another relative.<br>Possibility 3: School district does not want to take the attendance hit, so marks the student as a stop out which is a transfer code. | Transfer out |

*Note*. LTS-CR = long-term-suspension credit recovery.

exclusionary discipline, educators must recognize the need to help the most marginalized and vulnerable students. Students exhibiting violent behavior, harassment, and drug and alcohol abuse frequently have been exposed to these vices at a young age, and without proper treatment and care these attributes will continue to fester and add to the school-to-prison pipeline. LTS-CR holds the potential to give the students the skills and academic fortitude necessary to recognize that there are other options for the future.

# Chapter 3: Data and Methods

## Empirical Context

In this study, I looked at a single sample of student graduation exit codes from two Missouri school districts, designated District 1 and District 2. The goal of the study was to identify the extent of any relationship between the likelihood of graduation of students who serve long-term suspensions in a school sponsored long-term-suspension credit-recovery (LTS-CR) program compared to students who serve out of school suspension without such a program.

In District 1, students were given the option to serve their suspension using an LTS-CR program. This LTS-CR program was separate and housed in a building away from the other schools in the district. Students who chose the LTS-CR option gave up their right to appeal their suspension to the school board. Their school schedule was converted to either online classes or correspondence courses with their original teacher. A certified teacher monitored the students in a strict in-school suspension setting. Upon students completing their suspensions, they were transitioned back to their home school, and the work they completed in LTS-CR was converted into a grade that was transferred into their class as if they were a transfer student.

In District 2, students were suspended out of school for 11–180 days and could not make up work or receive credit for the classes they were in. The variable of interest between these two districts was participation in an LTS-CR program for students with 11 days or more of out-of-school suspension. District 1 allowed students to choose the LTS-CR program and convert an out of school suspension into an in-school suspension that was housed off campus. District 2 excluded students from all school academic credits, classes, activities, and grounds for the duration of their suspension.

My hypothesis was that there is a positive correlation between students' participation in the LTS-CR program and graduation rate. I performed binary logistic regression analysis for all students suspended for more than 11 days in both districts to identify whether a relationship existed between graduation rates and participation in an LTS-CR program. The null hypothesis was that there was no relationship between graduation rates and participation in an LTS-CR program.

For my study, I chose two districts that had very different policies toward discipline. I chose these districts for several reasons. The first reason is a convenience factor. I worked in both of these districts as an administrator and I have a working relationship, knowledge of district policy, and access to the data as a trusted associate. District 1 had a tough zero-tolerance stance against drugs, alcohol, or activities that would endanger other students. As an example, a student under the influence of drugs at school or a school event would incur a 45 day suspension with the option of enrollment in the LTS-CR program on his or her first offense. District 2 suspended students long-term only after their second major offense. District 1 also had a robust LTS-CR program for students serving out of school suspensions for more than 10 days, while District 2 did not.

Much of the research around *implicit bias* showed that students belonging to ethnic minorities were over-represented in out of school suspensions, more frequently subjected to out of school suspensions than White students, and were given out of school suspensions for minor offenses. By choosing two districts in which over 80 percent of the students were White and which had low (under 20 percent) free- and reduced-lunch participation, I emphasized the suspensions themselves and not the implicit bias that has been shown to impact suspensions in more diverse school districts. I wanted to be able to show disproportionality by comparing the

race, gender, and free/reduced lunch percentages of students enrolled in the school district to those same percentages of students assigned to long-term suspension.

Another important factor that helped in choosing these two school districts was the availability of confidential discipline records and the insight I had into the school cultures. As a former administrator in both districts, I was granted access of student discipline for this study by the superintendents of both school districts (See Appendix B and C). These data would have been more difficult for an outside researcher to obtain. This is an important aspect for researchers to address when considering future studies.

**Data Plan**

The purpose of this study was to describe whether there is a statistically significant relationship between the likelihood of a student's graduation and participation in an LTS-CR program among long-term suspended students while controlling for other factors (such as gender and race). I conducted a binary logistic regression analysis on a sample of 235 long-term suspended students from the two school districts over the course of 5 years using Equation 1.

$$Graduate_i = \beta_0 + \beta_1 LTS\text{-}CR_i + \mathcal{E}_i \quad (1)$$

where:

| | |
|---|---|
| i | = Individual students |
| LTS-CR | = Long-term suspension Credit Recovery participation (0/1) |
| ε | = Unexplained error |

A second multiple regression was conducted using Equation 2 to look at several variables that previous studies had linked to a student's failure to graduate. This was conducted to observe the potential relationship between any of these other factors and the likelihood of a student to graduate.

$$\text{Graduate}_i = \beta_0 + \beta_1 \text{ LTS-CR}_i + \beta_2 \text{ Reading}_i + \beta_3 \text{ Dur\_45Days}_i + \beta_4 \text{ Dur\_90Days}_i + \beta_5 \text{ Dur\_180Days}_i + \beta_6 \text{ Gender}_i + \beta_7 \text{ FRL}_i + \beta_8 \text{ RaceEthnicity}_i + \varepsilon_i \quad (2)$$

where:

| | |
|---|---|
| i | = Individual students |
| LTS-CR | = Long-term suspension Credit Recovery participation (0/1) |
| Reading | = Proficient on 10th grade communication arts end of course exam (0/1) |
| Dur_45Days | = Duration of suspension is 45 days or less |
| Dur_90Days | = Duration of suspension is 90 days |
| Dur_180Days | = Duration of suspension is 180 days |
| Gender | = Female/Male (0/1) |
| FRL | = Free/reduced lunch status participation (0/1) |
| RaceEthnicity | = Nonwhite/white (0/1) |
| ε | = Unexplained error |

**Procedure**

After receiving institutional review board (IRB) approval for the study, I sent a letter to each school district requesting collection of the needed information. I worked with the school district data administrator and to discuss appropriate ways to pull this data and share the confidential data for this study. After I have received written approval (Appendix B and C) and the data from the school districts in an Excel (version 16.16.6) .xls format, I securely stored this information on my own laptop, with the understanding that six months after the successful defense of this dissertation, all data will be deleted from my laptop and files.

The data was reviewed and analyzed for anomalies, data errors, or extreme outliers, upon analysis, the discrepancies that could not be reasonably explained were removed from the original data and kept in a separate file. Since this study used a binary logistical regression, the data was combined in a reasonable manner to make the variables dichotomous. I used SPSS (version 25.0.0) to run a Chi-Squared analysis of association for each independent variable against the graduation data of each incident. This allowed me to determine each variables correlation with graduation without any of the other variables as a factor. I, then, ran a binary

logistic regression model on graduation rates and the correlation of each variable. With the results of the Chi-Square analysis and the binary logistic regression I looked for statistical significance and reported the findings in this study.

**Measures**

The variable studied to find if it related to graduation rate was participation in an LTS-CR program. Students were identified as either participating in an LTS-CR program or not. A necessary part of this study was factoring for race, gender, 10th-grade reading score, duration of suspension, and free- and reduced-lunch status. It is necessary because looking at these variables allowed me to interpret the data with reference to existing research in implicit bias (Medez 2003; Skiba, 2014b). It also allowed me to investigate whether factors such as reading proficiency or the duration of the suspension had measurable effect on graduation for long-term suspended students. Data were collected from both districts and compiled in a Microsoft Excel (Version 16.16.6) spreadsheet. The districts had differing codes for the variables that were requested. Because I was using binary logistic regression to analyze the data, I categorized all data, used in the study, according to a dichotomous code. For example, there were several exit codes for students in one school district which included: active, graduated, dropout, transfer to public, transfer to private, transfer to homeschool, transfer to private out of state, and transfer to public out of state. I merged these codes into three categories: graduated, not graduated, and active. The same kind of categorization occurred for each variable in the study, with the exception of type of offense. Type of offense had 13 codes that did not lend themselves to dichotomous coding, but more importantly, a vast majority of the offenses (75 percent) were for the same offense, which was drugs and alcohol. I decided not to include this variable in the regression models. In the discussion that follows, I include the data and my rationale for the chosen

categorization along with more details about each variable that will need to be understood for further research.

**Analytical Plan**

The data were analyzed using binary logistic regression comparing graduation rates of students who participated in an LTS-CR program to those who did not. Part of the reason for conducting this study was to give schools an alternative to the theoretical conclusion that schools must move to a no-suspension approach because research on suspensions, zero-tolerance policies, and racial bias of suspensions has shown that out-of-school suspensions have negative consequences for student achievement and social–emotional well-being (Hoffman, 2014; Mendez, 2003; Skiba, 2014a; Townsend, 2000; Wilson, 2014).

The information needed was:

*Participation in an LTS-CR program* – was the student offered participation in the LTS program, did they complete the program, did they withdraw from the program or was the program unavailable to them. I categorized students as participants or non-participants. If they were offered the program and did not accept it or never were in the program, they were considered non-participants. If they were in the program for any length of time regardless of completion, they were categorized as participants.

*Gender* – was the student identified as male or female.

*Race or ethnicity* – did the student identify their race on school records as Asian, Hispanic, Native American, Mixed, Black, or White. I categorized students as White or non-White.

*Duration of the suspension* – how many days was the long-term suspension. This was between 11 and 180 days. 11 days is the least number of days for a suspension to be categorized as long-term and a suspension over 180 days is considered an expulsion, which is a permanent removal from public schools. I categorized the duration into less than 45 days, 45 days, 90 days, and 180 days.

*Type of offense* – what was the reason for the suspension

*Communications Arts II end-of-course score* – was the student advanced, proficient, basic or below basic on the 10th grade standardized state reading test. Advanced and proficient were considered proficient. Basic and below basic were considered not proficient.

*Transfer or graduation status* – included students who were still active students, graduated students, transferred students, and dropouts. If a student was a graduated student, they were coded as graduated. If they were coded as a dropout or transferred with insufficient credit to graduate with their cohort they were coded as non-graduated. Active students were coded as such and were not part of the study.

*Free and reduced-lunch status* – students were coded as either free lunch status, reduced lunch status or normal lunch status. For this study I combined free and reduced lunch status together as one code and normal lunch status as the non-free and reduced lunch code.

I combined the data from both districts into a table with student information and school information eliminated to protect the identity of the participants. Table 2 shows an example.

Table 2

*Example of Data to Be Collected from School Districts*

| Variable | Student 1 | Student 2 | Student 3 |
|---|---|---|---|
| Gender | 1 | 0 | 1 |
| Ethnicity | 1 | 0 | 1 |
| Communication Arts II end-of-course score | 1 | 1 | 0 |
| Free-lunch status | 1 | 0 | 0 |
| Graduation or transfer status | 1 | 0 | 1 |
| Enrollment in long-term-suspension credit recovery | 1 | 0 | 1 |
| Reason for suspension | 1 | 12 | 3 |
| Length of suspension (days) | 0 | 1 | 0 |

The data were extracted from school data for all long-term (more than 10 day) suspended students from District 1 and District 2 between 2012 and 2017. The data were extracted from the PowerSchool information system at both school districts in the form of a Microsoft Excel spreadsheet. Table 3 shows how the data were encoded once they were received from the school district administrators to make it dichotomous for the binary logistic regression analysis. Looking at Table 15 and using the coding on Table 16, one can see that Student 1 is a male, white, proficient in reading, on free and reduced lunch status, graduated, was a participant in LTS-CR, suspended for drugs or alcohol, and was suspended for 45 days or less.

These data were used in the binary logistic regression analysis, with each of the variables analyzed to see how well it predicted the likelihood of graduation. I used SPSS (Version 25.0.0) to run the binary logistic regression analyses. Prior to conducting the study, I went through each district's process for information gathering as stipulated by the districts and required by research ethics.

Table 3

*Numerical Encodings Used for Variables*

| Variable | Encoding |
|---|---|
| Male | |
| Female | 0 |
| Male | 1 |
| White | |
| Nonwhite | 0 |
| White | 1 |
| Reading proficiency | |
| Not proficient | 0 |
| Proficient | 1 |
| Free- or reduced-lunch status | |
| Regular lunch | 0 |
| Free or reduced lunch | 1 |
| Graduation | |
| Not graduated | 0 |
| Graduated | 1 |
| LTS-CR participation | |
| Did not participate | 0 |
| Participated | 1 |
| Reason for suspension | |
| Drugs/Alcohol | 1 |
| Assault | 2 |
| Behavior | 3 |
| Bullying | 4 |
| Fight | 5 |
| Inappropriate items | 6 |
| Sexual activity | 7 |
| Sexual harassment | 8 |
| Technology violation | 9 |
| Theft | 10 |
| Threat | 11 |
| Weapon | 12 |
| Duration | |
| 45 days or less | 0 |
| 90 days or more | 1 |
| School district | |
| District 2 | 0 |
| District 1 | 1 |

*Note*. LTS-CR = long-term-suspension credit recovery.

# Chapter 4: Results

## School District Context

All data in the state of Missouri is reported to the Department of Elementary and Secondary Education in Jefferson City by each of the approximately 537 public school districts and charter schools. The data in Table 4 was compiled using the Missouri Comprehensive Data System and the Annual Report Card from District 1 and District 2 in this study. One of the first details that requires explanation is the graduation rates and the dropout rates. On Table 4, these rates are 94.28 percent and .8 percent respectively for District 1, and 95.33 percent and .8 percent respectively for District 2. To explain the roughly four to five percent of students missing from the data it is important to revisit the cohort system of accountability in Missouri.

In Missouri, at the time of the study, a student was placed in a cohort group when the student entered the ninth grade. The state counted students as dropouts if they did not graduate with their cohort after 4 years of high school. To help some of these students catch up to their peers the state had developed a program called Missouri Options, which was designed to help students who were credit deficient at age 17 or upon entering their senior year in high school. Students who entered this program in a Missouri high school were expected to come to school for 15 hours of seat time per week. The students then took a high school equivalency exam called the HISET, and if they passed, they were granted a diploma from their high school. Students in this program are not counted as graduates or as dropouts.

Table 4

*Demographics of District 1 and District 2 (2017)*

| Category | District 1 | District 2 |
|---|---|---|
| K-12 enrollment | 12,009 | 3,442 |
| One-year growth rate | 250 | −164 |
| Race (%) | | |
| White | 81.5 | 93.6 |
| Black | 5.2 | 1.0 |
| Hispanic | 6.6 | 2.4 |
| Free or reduced lunch (%) | 18.9 | 13.5 |
| Average daily attendance (%) | 90.9 | 90.3 |
| 4-year graduation rate (%) | 94.28 | 95.33 |
| Number of credits required | 25.5 | 24 |
| Dropout rate (%) | 0.80 | 0.80 |
| Expenditure per student ($) | 9,617 | 9,366 |
| Number of schools | | |
| Elementary | 12 | 4 |
| Middle | 4 | 1 |
| Junior High | 0 | 1 |
| High | 2 | 1 |
| Alternative | 1 | 0 |
| Teacher-to-student ratio | 19:1 | 18:1 |

*Note.* K-12 = kindergarten to 12th grade.

**Error! Reference source not found.** Table 5 summarizes the number of suspensions of 10 days or longer between 2013 and 2017 for both districts. District 1 incorporated an LTS-CR program in 2010 to reduce the number of dropouts occurring due to long-term suspension. District 2 had had no LTS-CR program at the time of the study. Two other differences that

should be noted were in the total student populations and the suspension rates. District 1 had approximately 4 times as many students as District 2. After adjusting the suspension rates for this discrepancy, District 2 was placing a higher proportion of its students on long-term suspension than District 1 was. With no LTS-CR program in place, District 2 had already found these long-term suspensions detrimental to its students' success in school. Table 5 shows all suspensions of 10 days or more for Districts 1 ans 2 in the first two columns. The columns marked LTS District # are suspensions reported by the school district as being eleven or more days. These are considered long-term suspensions that had to be imposed on a student by the superintendent of the school district.

Table 5

*Total School District Suspensions of 10 or More Days in Duration as Reported by the District to the State of Missouri and Long Term Suspensions Reported for this Study.*

| Year | District 1 | District 2 | LTS District 1 | LTS District 2 |
|---|---|---|---|---|
| 2013 | 62 (0.54%) | 26 (0.54%) | 43 (0.38%) | 2 (0.05%) |
| 2014 | 60 (0.51%) | 17(0.47%) | 37 (0.31%) | 9 (0.25%) |
| 2015 | 81 (0.68%) | 38 (1.08%) | 56 (0.47%) | 2 (0.05%) |
| 2016 | 87 (0.72%) | 25 (0.72%) | 47 (0.39%) | 6 (0.17%) |
| 2017 | 74 (0.61%) | 30 (0.87%) | 29 (0.23%) | 4 (0.11%) |
| Total | 364 | 136 | 212 | 23 |

*Note*. These data include all suspensions of 10 days or more. For this study, long-term suspensions were at least 11 days long.

Table 6 shows the number and percentage of all variables of the study. As noted, in Chapter 3 all variables were combined to be dichotomous for the binary logistic regression analysis.

Table 6

*Frequencies and Percentages for All Variables*

| Variable | *n* | % |
|---|---|---|
| Graduated | | |
| Not graduated | 76 | 32.3 |
| Graduated | 159 | 67.7 |
| LTS-CR participation | | |
| Did not participate | 47 | 20.0 |
| Participated | 188 | 80.0 |
| Reading proficiency | | |
| Not proficient | 58 | 24.7 |
| Proficient | 122 | 51.9 |
| Missing | 55 | 23.4 |
| Offense | | |
| Drugs/alcohol | 175 | 74.5 |
| Assault | 8 | 3.4 |
| Behavior | 3 | 1.3 |
| Bullying | 1 | 0.4 |
| Fight | 1 | 0.4 |
| Inappropriate items | 2 | 0.9 |
| Sexual activity | 6 | 2.6 |
| Sexual harassment | 5 | 2.1 |
| Technology | 3 | 1.3 |
| Theft | 2 | 0.9 |
| Threat | 15 | 6.4 |
| Weapon | 14 | 6.0 |
| Male | | |
| Female | 56 | 23.8 |
| Male | 179 | 76.2 |
| White | | |
| Nonwhite | 63 | 26.8 |
| White | 172 | 73.2 |
| District | | |
| District 2 | 23 | 9.8 |
| District 1 | 212 | 90.2 |
| Duration | | |
| < 45 Days | 15 | 6.4 |
| 45 Days | 125 | 53.2 |
| 90 Days | 68 | 28.9 |
| 180 Days | 27 | 11.5 |

*Note*. LTS-CR = long-term-suspension credit recovery.

**Description of Dependent Variable Frequencies.** The dependent variable for this study is graduation. To define graduation for the study I used data from both school districts collected in 2018 from the 5-year period 2012–2017. There were 235 total incidents. A graduated student was any student who achieved graduate status on time—meaning with the cohort that the student entered in the ninth grade. An active student was still a current student with the ability to graduate on time with their cohort. A not-graduated student was any student who transferred out of school or dropped out. It could also mean an active student who was considered a dropout by the state because the student could not graduate with the cohort based on credits.

In Missouri, any student who did not graduate within the first 4 years of high school was considered a dropout. To graduate a student had to complete the required credits for each school district within four years of entering high school with a cohort. There was a policy difference between the two districts here. District 1 required students to acquire 25.5 credits of classes to graduate. District 2 required 24 credits, which was the state minimum, for a student to graduate. This distinction provides some perspective on the impact an LTS-CR program can have on the graduation success of students on long-term suspension. This distinction also has a role in the graduation rates reported on Table 2 by each district. District 1 reported a graduation rate of 94.28 percent with students needing 25.5 credits, and District 2 reported a graduation rate of 95.43 percent with students needing 24 credits to graduate.

Table 7 and **Error! Reference source not found.** list the actual exit codes given to students by each school district. In **Error! Reference source not found.** are specific codes for each transfer student and current student from District 1. In **Error! Reference source not found.** are the more generalized exit codes indicating how students left District 2. The state of

Missouri had schools report these codes as part of the Missouri Student Information System (MOSIS).

Table 4

*Number of Incidents Requiring Long-Term Suspension by Exit Code in District 1 (2012–2017)*

| Exit code | Count of incidents |
|---|---|
| 2nd YR Sr | 1 |
| Behind 1 Semester 11th | 1 |
| Behind 1 Semester 12th | 4 |
| Dropout | 26 |
| Graduated | 136 |
| On Track 10th | 2 |
| On Track 11th | 2 |
| On Track 12th | 2 |
| Transfer Home-School | 3 |
| Transfer Private MO | 6 |
| Transfer Private Out of MO | 1 |
| Transfer Public MO | 21 |
| Transfer Public Out of MO | 7 |
| Total | 212 |

Table 5

*Number of Incidents Requiring Long-Term Suspension by Exit Code in District 2 (2012–2017)*

| Exit code | Count of incidents |
|---|---|
| Current | 6 |
| Drop Out | 7 |
| Graduated | 5 |
| Transfer | 5 |
| Total | 23 |

I elected to use the graduation statuses of graduated and not graduated to relate to the dependent variable of the research questions. For this study, student exit codes from both school districts are condensed into one of three categories, shown in Table 9. This condensation allowed me to narrow 13 different exit codes into a more manageable set of codes that were consistent between the two districts. Students were either active, graduated, or not graduated from a school in Missouri. Each student had a MOSIS number, a state student identification number that did not change from one school to another. This has allowed the state to track student enrollment and status from one Missouri school to another. This system has worked very well for students who transferred from one public school to another in Missouri, but when they transferred to or from other states, private schools, or home school this system could not track the student's status. When a student was on long-term suspension, the student was kept in the district's enrollment until the student was identified as transferring to home school, another school, or another state. Because most schools in Missouri honored each other's suspensions, students rarely transferred to other schools inside the state to avoid serving suspensions, unless they transferred to private schools. One area of difference between the two school districts is easily seen in these data. In District 1, 30.1 percent of students did not graduate, but in District 2, 52.1 percent of students did not graduate.

Table 6

*Number of Incidents Requiring Long-Term Suspension by Graduation Status (2012–2017)*

| | Count of incidents | |
|---|---|---|
| Graduation status | District 1 | District 2 |
| Active | 12 (5.6%) | 6 (26%) |
| Graduated | 136 (64.1%) | 5 (21.7%) |
| Not graduated | 64 (30.1%) | 12 (52.1%) |
| Total | 212 | 23 |

**Description of Independent Variable Frequencies.** To test my hypotheses for my primary and secondary research questions, I included variables on LTS-CR program participation, gender, ethnicity, free- or reduced-lunch status, reading proficiency, duration of suspension, and offense. The dependent variable was dichotomous, indicating whether a student had graduated from school after being suspended. The independent variables were also condensed, when necessary, to allow for binary logistic regression.

**Error! Reference source not found.** indicates the number of students who participated in the LTS-CR program in District 1. District 2 did not have an LTS-CR program, so none of the 23 suspended students in that school district had the option of an LTS-CR program. The basis for this study was the correlation of participation in an LTS-CR program (Table 10) and graduation (Table 9). The hypothesis of a positive correlation between these variables could be tested using these data.

Table 7

*Number of Participants in the Long-Term-Suspension Credit-Recovery (LTS-CR) Program (2012–2017)*

| | Count of incidents | |
|---|---|---|
| Participation in LTS-CR | District 1 | District 2 |
| Participant | 188 (88.7%) | 0 |
| Nonparticipant | 24 (11.3%) | 23 (100.0%) |
| Total | 212 | 23 |

However, one of the challenges to my analyses was the need to account for the potential influence of other variables that could be measured in school data. The first of these challenges addressed the question of gender. Table 11 shows the distribution of incidents between female and male students.

Table 8

*Number of Incidents Requiring Long-Term Suspension by Gender (2012 –2017)*

| | Count of incidents | |
|---|---|---|
| Gender | District 1 | District 2 |
| Female | 54 (25%) | 2 (9%) |
| Male | 158 (75%) | 21 (91%) |
| Total | 212 | 23 |

Table 12 gives the total number of long-term suspensions assigned, categorized according to race of the student. Looking at the percentages for race and comparing them with Table 2 some disproportionality is visible in the data provided by District 1. District 1 reports that 18.8 percent of the students' given Long-Term Suspension were Black, but Black students make up only 5.2 percent of the student population in the district.

Table 9

*Number of Incidents Requiring Long-Term Suspension by Race (2012 –2017)*

| | Count of incidents | |
|---|---|---|
| Race | District 1 | District 2 |
| Asian | 1 (0.47%) | 0 |
| Black | 41 (18.8%) | 0 |
| Hispanic | 11 (5.2%) | 2 (8.6%) |
| Native American | 3 (1.4%) | 0 |
| Mixed | 5 (2.3%) | 0 |
| White | 151 (71.2%) | 21 (91.3%) |
| Total | 212 | 23 |

Consider, however, the actual number of students involved in these incidents. Table 12 gives the numbers of every incident, but some of those incidents are committed by the same student.

Table 13 shows the number of students who received long-term suspensions, rather than the number of incidents, again categorized according to race. The tables show that, for District 1, 188 students were responsible for 212 incidents, so that the recidivism rate for District 1 was 12 percent. In District 2, meanwhile, reported that there were no reoffenders. One consideration in effective discipline is the recidivism rate. Often, discipline is considered effective if it has a low recidivism rate, measured by the percentage of students who reoffend.

Table 10

*Number of Students Requiring Long-Term Suspension by Race Without Repeat Offenders (2012–2017)*

| | Number of students suspended | |
|---|---|---|
| Race | District 1 | District 2 |
| Asian | 1 (.53%) | 0 |
| Black | 37 (19.6%) | 0 |
| Hispanic | 8 (4.2%) | 2 (8.6%) |
| Native American | 2 (1.1%) | 0 |
| Mixed | 4 (2.2%) | 0 |
| White | 136 (72.3%) | 21 (91.3%) |
| Total | 188 | 23 |

*Note.* There were no repeat offenders reported by District 2. Therefore, the count of students was the same as the count of incidents in that district.

It is important to understand that the number of reoffenders reveals a potentially serious flaw in evaluation of a school district's suspension policy. The suspensions from Districts 1 and 2 illustrate the flaws of looking at recidivism rates. In District 1, a student found under the influence of, or in possession of, drugs or alcohol was suspended for 45 or 90 days for a first incident, 90 or 180 days for a second incident, and 180 days for a third incident. All these students were given the option of spending their suspensions in the LTS-CR program.

In District 2, a first offense for possession of, or being under the influence of, drugs or alcohol resulted in a 10-day suspension. This was not considered a long-term suspension and, therefore, did not contribute to the recidivism rate. Students in District 2 were only given long-term suspensions for being under the influence of, or in possession of, drugs or alcohol if this was a second or third offense. As Table 17 shows, 18 out of the 23 suspensions in District 2 were for drugs or alcohol, which would bring the recidivism rate to 78 percent.

The difference between Table 12 and Table 13 is important because, in many cases, schools, districts, states, and the federal government have examined the distribution of discipline according to race to determine whether there was prejudicial or disproportionate discipline toward students belonging to racial minorities (Skiba, 2014b). The data for District 1 represent a total of 212 incidents for the 5 years of the study. Included in the 212 incidents were 46 second offenses and one third offense. The data for District 2 represent a total of 23 incidents for the 5 years of the study. 18 of the 23 offenses in District 2 were second offenses for drugs or alcohol. However, because of a difference in board policy with District 1, a first offense in District 2 carries a ten day out of school suspension. Comparing District 1's demographics to the suspension statistics reveals that even though White students accounted for 82 percent of the student body, they made up 72 percent of the long-term suspensions. Black students made up 5.5 percent of the student body and accounted for 20 percent of the long-term suspensions. Hispanics made up 6 percent of the student body and accounted for 4 percent of the suspensions. In District 2, however, the races associated with suspensions were in proportion to the demographics of the student body.

Table 14 shows a very straightforward count of suspended students free- and reduced-lunch status in both districts. In District 1, 19 percent of the entire student body were eligible for

free or reduced lunches, but only 10 percent of long-term suspensions were of eligible students. In District 2, 14 percent of the student body were eligible, but 35 percent of long-term suspensions were of eligible students.

Table 11

*Number of Incidents Requiring Long-Term Suspension by Free- or Reduced-Lunch Status (2012–2017)*

| | Count of incidents | |
|---|---|---|
| Eligible for free or reduced lunch | District 1 | District 2 |
| No | 190 (89.6%) | 15 (65.2%) |
| Yes | 22 (10.4%) | 8 (34.8%) |
| Total | 212 | 23 |

Table 15 provides the reading proficiency scores from the end-of-course examination in Communication Arts II for students in 10th grade. Student proficiency on the state assessment was categorized by competency level. Students passed the test at a proficient or advanced level. Students below the state standards were scored as basic or below basic, meaning that they had not mastered the essential standards for reading and writing at the 10th-grade level. Districts were required to report the scores of this examination to all students prior to graduation from the district. If a student did not have a score for this exam, the score was counted as a level not determined. The state of Missouri allowed a district to report no more than 1 percent of all scores as a level not determined per cohort of students. Therefore, districts saw it as essential to test students before they either graduated or dropped out. If a student transferred, the task of testing the student shifted to the new school or district. In the case of a student who transferred to home school, a private school, or out of state, the mandate for testing was dropped and the school was not penalized with a level not determined.

Table 12

*Number of Incidents Requiring Long Term Suspension by Communication Arts II End-of-Course Score (2012 –2017)*

| | Count of incidents (% of suspended students) | | % of all students | |
|---|---|---|---|---|
| Score | District 1 | District 2 | District 1 | District 2 |
| None | 43 (20.2) | 12 (52.1) | 0.2 | 0.0 |
| Below basic | 4 (1.8) | 1 (4.3) | 1.4 | 2.1 |
| Basic | 51 (24) | 2 (8.6) | 11.5 | 11.6 |
| Proficient | 97 (45.7) | 6 (26) | 62.0 | 63.5 |
| Advanced | 17 (8) | 2 (8.6) | 25.3 | 22.9 |
| Total | 212 | 23 | | |

Of the 43 incidents associated with students with no score in District 1, eight of the students graduated over the course of the study period, which would have been acceptable by the state standards for a level not determined. Seven were active students, 10 dropped out, and 18 transferred out of the district. In District 2, one student graduated over the study period, four were still active students, four dropped out, and three transferred out of the school district. Of interest is the percentage of students who were rated proficient or advanced in both school districts. In District 1, 54 percent of the suspended students were rated proficient or advanced, and 26 percent of suspended students were rated basic or below basic. In District 2, 35 percent of suspended students were rated proficient or advanced, but only 13 percent were rated basic or below basic.

Table 16 gives the number of incidents that required long-term suspension (any suspension of more than 10 days) for both school districts.

Table 13

*Number of Incidents Requiring Long-Term Suspension by School Year with Percentage of the Entire Student Body (2012 –2017)*

| | Count of incidents | |
|---|---|---|
| Year | District 1 | District 2 |
| 2012–2013 | 43 (0.38%) | 2 (0.05%) |
| 2013–2014 | 37 (0.31%) | 9 (0.25%) |
| 2014–2015 | 56 (0.47%) | 2 (0.05%) |
| 2015–2016 | 47 (0.39%) | 6 (0.17%) |
| 2016–2017 | 29 (0.23%) | 4 (0.11%) |
| Total | 212 | 23 |

Figure 1 shows the lengths of the suspensions.in both school districts. Most of the suspensions were for 45, 90, or 180 days. The other suspension lengths were due to the superintendent or superintendent's designee assigning the suspension until the end of a semester or school year. This allowed the student to come back to a fresh start the following semester or school year or to graduate with the cohort.

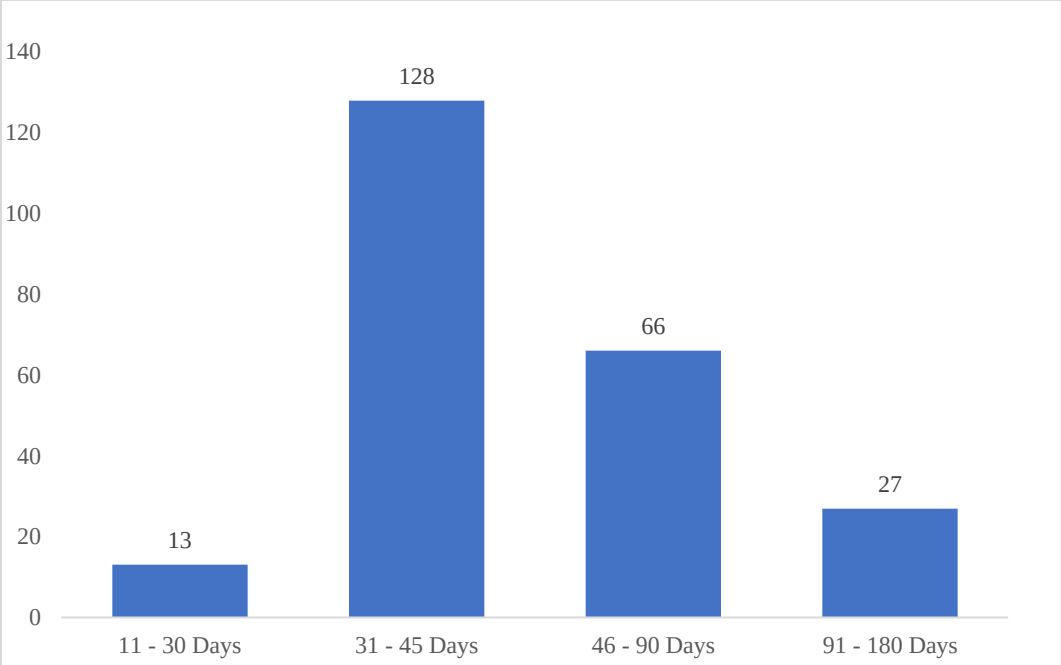


*Figure 1.* Number of incidents requiring long-term suspension versus length of suspension (2012–2017).

Table 17 shows the types of offenses that caused the suspensions. Seventy-four percent of offenses were for drugs and alcohol. These could be being under the influence of, being in possession of, or distributing contraband substances. Twenty-eighth percent of the students suspended for drugs and alcohol did not graduate from District 1, even though they received the option of an LTS-CR program with a drug and alcohol interdiction component with a licensed social worker. Of the 35 students (17 percent) in District 1 suspended for threats, weapons, fighting, bullying, or assault, 80 percent graduated after completing the LTS-CR program. In District 2, the four students who were suspended for weapons or threats also represented 18 percent of the total incidents in that district. However, only 25 percent of those students graduated.

Table 14

*Number of Incidents Requiring Long-Term Suspension by Type of Offense (2012 –2017)*

| | Count of incidents | |
|---|---|---|
| Offense | District 1 | District 2 |
| Drugs or alcohol | | |
| Drugs | 143 (67.4%) | — |
| Alcohol | 14 (6.6%) | — |
| Either | 157 (74%) | 18 (78.2%) |
| Assault | 8 (3.7%) | 0 |
| Behavior | 2 (0.9%) | 1 (4.3%) |
| Bullying or hazing | 1 (0.47%) | 0 |
| Fight | 1 (0.47%) | 0 |
| Inappropriate item or material | 2 (0.9%) | 0 |
| Sexual activity | 6 (2.8%) | 0 |
| Sexual harassment | 5 (2.3%) | 0 |
| Technology violation | 3 (1.4%) | 0 |
| Theft | 2 (0.9%) | 0 |
| Threat or intimidation | 14 (6.6%) | 1 (4.3%) |
| Weapon | 11 (5.1%) | 3 (13%) |
| Total | 212 | 23 |

*Note.* District 2 reported reasons related to drugs or alcohol together in a single category, but District 1 reported them separately.

Of particular interest for this study were the of students who participated in the LTS-CR program. In District 1, students were given the option to participate, appeal their suspension to the school board, or take the suspension as an out-of-school suspension with no way to regain credit for the classes missed. Of the 188 students who accepted LTS-CR program participation, 141 (75 percent) graduated or were still students in school, 20 (10.6 percent) were confirmed dropouts, and 27 (14.3 percent) transferred out. Twenty-four students chose not to participate in

the LTS-CR program. Of these remaining 24 students, seven (29 percent) graduated or were current students, six (25 percent) dropped out, and 11 (46 percent) transferred out of the school district.

District 2 did not offer an LTS-CR program to suspended students. Of the 23 students suspended long term, 11 (48 percent) graduated or were current. However, six of these students were active students who were significantly behind their grade level. If they did not graduate with their cohort, they would be counted as a dropout, even if they were current students. For this reason, the numbers for District 2 could be five (22 percent) graduated and seven (30 percent) dropped out, although this could rise to 13 (57 percent) dropped out, and five (22 percent) transferred out.

**Findings**

The results of the chi-square tests that were conducted on each of the independent variables showed a significant relationship between graduation and three of the independent variables. Table 6 shows the chi-square for each variable as well as Cramer's *V*, which is used to explain the strength of the association between the variables. There was significant association between LTS-CR participation and graduation, $\chi^2(1) = 23.147$, $p < .001$. Cramer's *V* was significant, $V = .314$, $p < .01$, and it indicated a high strength of association. For the Chi-Square test of association the higher the chi-square value the greater the association. Once I obtained the statistical significance from the chi-squared test I was able to determine the strength of association in order to run the variables through the binary linear regression analysis. The null hypothesis that there is no relationship between the likelihood of graduation and participation in a long-term suspension credit recovery program is rejected, and the binary logistic regression was performed to estimate the strength of that relationship.

Table 15

*Results from Chi-Square Tests for Each Independent Variable Compared to Graduation Status*

| Variable | $\chi^2$ | Cramer's V |
|---|---|---|
| LTS-CR participation | 23.147*** | 0.314*** |
| Reading proficiency | 8.774** | 0.221** |
| Male | 0.132 | 0.024 |
| White | 0.187 | 0.028 |
| Duration less than 45 days | 4.827* | 0.143* |
| Duration 45 days | 0.159 | 0.026 |
| Duration 90 days | 0.000 | 0.000 |
| Duration 180 days | 5.307* | 0.150* |
| Free or reduced lunch | 1.899 | 0.090 |

*Note*. LTS-CR = long-term-suspension credit recovery.
*p < .05. **p < .01. ***p < .001.

There was also significant association between reading proficiency and graduation, $\chi^2(1)= 8.774$, p <.01. Cramer's V was significant, V = .221, p < .01 and it indicated a high strength of association. This indicated that there was a strong association between the likelihood to graduate and reading proficiency and the null was rejected.

There was an additional significant association between the duration of the suspension and graduation. For suspensions lasting less than 45 days, $\chi^2(1) = 4.827$, $p$ <.05. Cramer's $V$ was significant, $V = .143$, $p < .05$, and it indicated a high strength of association. For 180-day suspensions, $\chi^2(1) = 5.307$, $p$ <.05. Cramer's $V$ was significant, $V = .150$, $p < .05$.

The results of the independent chi-square tests supported the association between participation in LTS-CR programs, reading proficiency, and duration of the suspension with graduation. There was a positive association between LTS-CR involvement and graduation, as well as a positive association between reading proficiency and graduation. However, there was a

negative association with the duration of the suspension. The results painted a mixed picture of the school districts, showing that a suspension had a negative impact on graduation when it was shorter than 45 days (too short) and longer than 180 days (too long). The results from these initial tests indicated that there was a "Goldilocks" (ie. not too short, not too long) duration for suspensions between 45 and 90 days.

**Linear Regression Model**

The results of the full binary logistic regression conducted on multiple variables suggested that the three variables that were shown as significant by the chi-square tests remained so when the other variables were controlled for. Table 16 displays the results of each model. The final regression model, model six, identified significance with a strong positive relation to graduation in the areas of LTS-CR participation, reading proficiency, and a negative relation to the duration of the suspension when controlled for gender, race, and free- or reduced-lunch status. I employed logistic regression analysis to predict the probability that a suspended student would graduate from high school with his or her cohort. The predictor variables were LTS-CR program participation, reading proficiency, duration of suspension, gender, race, and free- or reduced-lunch status. A test of the full model versus a model with intercept only was significant for three factors: LTS-CR program participation, reading proficiency, and suspension durations of 180 days, $\chi^2(8) = 39.198$, $p < .001$, $N = 235$. The model was able correctly to classify 32 percent of those who did not graduate and 96 percent of those who graduated for an overall success rate of 81 percent.

To use binary logistic regression, assumptions of collinearity, no autocorrelation of residuals, linearity, and homoscedasticity had to be met. This study's sample was large enough ($n = 235$) to meet those assumptions. The Cox & Snell and Nagelkerke statistics fell within the

expected range and therefore indicated goodness of fit for each of the factors. Table 17 shows the logistic regression coefficient, Wald test statistic, and odds ratio for each of the predictors. Employing a .05 criterion of statistical significance, LTS-CR participation, reading proficiency, and suspension duration of 180 days all had significant partial effects. The odds ratio for LTS-CR participation indicated that when holding all other variables constant, a participant in an LTS-CR program was 8.9 times more likely to graduate than a non-participant.

Table 16

*Results of Binary Logistic Regression of Participation in Long-Term-Suspension Credit Recovery (LTS-CR) and Control Variables Showing the Intercept and Standard Error*

| Variable | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 |
|---|---|---|---|---|---|---|
| LTS-CR participation | | | | | | |
| Intercept | 1.703*** | 1.669*** | 2.218*** | 2.210*** | 2.191*** | 2.182*** |
| *SE* | 0.447 | 0.460 | 0.544 | 0.546 | 0.547 | 0.548 |
| Reading proficiency | | | | | | |
| Intercept | | 1.027*** | 1.251*** | 1.240*** | 1.233*** | 1.255*** |
| *SE* | | 0.385 | 0.414 | 0.416 | 0.417 | 0.422 |
| Duration less than 45 days | | | | | | |
| Intercept | | | 21.179 | 21.196 | 21.170 | 21.214 |
| *SE* | | | 11,004.152 | 11,012.199 | 11,001.707 | 10,960.785 |
| Duration 90 days | | | | | | |
| Intercept | | | 0.154 | 0.144 | 0.093 | 0.113 |
| *SE* | | | 0.466 | 0.467 | 0.473 | 0.476 |
| Duration 180 days | | | | | | |
| Intercept | | | −1.143* | −1.153* | −1.191* | −1.186* |
| *SE* | | | 0.583 | 0.584 | 0.588 | 0.589 |
| Male | | | | | | |
| Intercept | | | | −0.116 | −0.178 | −0.188 |
| *SE* | | | | 0.473 | 0.482 | 0.483 |
| Free or reduced lunch | | | | | | |
| Intercept | | | | | −0.51 | −0.575 |
| *SE* | | | | | 0.625 | 0.780 |
| White | | | | | | |
| Intercept | | | | | | −0.177 |
| *SE* | | | | | | 0.468 |
| Constant | | | | | | |
| Intercept | −0.154 | −0.760 | −1.379 | −1.275 | −1.127 | −1.001 |
| *SE* | 0.393 | 0.468 | 0.609 | 0.742 | 0.763 | 0.832 |
| Number of observations | 180 | 180 | 181 | 180 | 180 | 180 |
| Cox & Snell statistic | 0.076 | 0.112 | 0.192 | 0.192 | 0.195 | 0.196 |
| Nagelkerke statistic | 0.116 | 0.170 | 0.292 | 0.292 | 0.296 | 0.297 |

*p < .05. **p < .01. ***p < .001.

The odds ratio for reading proficiency indicated that when holding all other variables constant, a student who scored proficient or higher on the 10th-grade end-of-course examination for Communication Arts II was 3.5 times more likely to graduate than a student who was not proficient. Inverting the odds ratio for students suspended 180 days indicated that when holding all other variables constant a student suspended for the duration of 180 days was 30 percent less likely to graduate than a student suspended for 45 days.

Table 17

*Logistic Regression Predicting Graduation*

| Predictor | *B* | Wald $\chi^2$ | *p* | *OR* |
|---|---|---|---|---|
| LTS-CR participation | 2.182 | 15.830 | .000 | 8.863 |
| Reading proficiency | 1.255 | 8.851 | .003 | 3.506 |
| Duration less than 45 days | 21.214 | 0.000 | .998 | $1.633 \times 10^9$ |
| Duration 90 days | 0.113 | 0.056 | .812 | 1.12 |
| Duration 180 days | −1.186 | 4.051 | .044 | 0.306 |
| Male | −0.188 | 0.151 | .697 | 0.829 |
| Free or reduced lunch | −0.575 | 0.780 | .377 | 0.563 |
| White | −0.177 | 0.142 | .706 | 0.368 |
| Constant | −1.001 | 1.446 | .229 | 0.368 |

*Note*. LTS-CR = long-term-suspension credit recovery.

# Chapter 5: Discussion

## Summary

The main research question was: How does participation in a long-term-suspension credit-recovery (LTS-CR) program influence graduation for students who are suspended from school for over 10 days? The results of this study showed that the odds of suspended students graduating after participating in an LTS-CR program increased 8.863 times compared to those of students who did not participate in the program, all other things being equal. This supports the initial hypothesis, which was that LTS-CR programs would increase the graduation rate for students who were suspended for more than 10 days. The results also suggest that the school district that offered an LTS-CR program to long-term suspended students experienced a significantly lower percentage (30.1 percent) of students dropping or transferring out of its schools compared with the district that relied solely on out of school suspensions for long-term suspended students (52.1 percent).

The secondary research questions addressed by this study involved other factors, including race, gender, reading level, type of offense, and duration of suspension, and their effect on a long-term suspended student's graduation from high school. The findings suggest that two of the factors were statistically significant in the graduation of a student. The first of these factors was the suspended students' reading level. Suspended students proficient in reading were 3.5 times more likely to graduate than those who were not, as measured by the 10th-grade standardized state test. The second significant factor was the duration of the suspension. Most students (54.4 percent) were suspended for 45 days.

## Conclusions

The purpose of this study was to investigate a correlation between long-term suspended students' participation in LTS-CR programs and their graduation. At the conclusion of the study, the results indicate that there was a statistically significant correlation between student participation in LTS-CR programs and graduation. Because schools are required to suspend some students for serious offenses this study offers support for an approach for school district administrators other than exclusionary suspensions. By offering a suspended student the option of continuing his or her education in an LTS-CR program, a school district invests in that student's academic success while holding the student accountable for his or her actions.

**Effectiveness of exclusionary suspensions.** In previous studies, researchers have shown that serious negative consequences—including dropping out of school, social–emotional problems, and antisocial behavior—have resulted from exclusionary suspensions. This study supports previous research indicating that when students are given exclusionary suspensions, they are at higher risk of dropping out of school than those either not suspended or suspended for a short-term. I did not address social–emotional health or antisocial behavior. However, my findings do offer evidence that students who participate in an LTS-CR program in lieu of an exclusionary suspension are 8.863 times more likely to graduate than students who are suspended out of school.

Another finding of this study was that the duration of the suspension had a significant impact on the graduation of students. If a student was suspended for 180 days, which was the maximum suspension a superintendent could make, the student was 30 times less likely to graduate than a student suspended for 45 days. Previous research showed serious adverse effects and negative academic consequences for students, including poor retention, academic failure

(Arcia, 2006), loss of high school credit, less commitment to school (Costenbader, 1998), and an increase in dropout rate (Mendez, 2009). By implementing an LTS-CR program, a district can positively affect each of the adverse and serious consequences of long-term suspensions.

The core characteristics of the effective LTS-CR program employed in District 1 were: (a) an LTS-CR contract, (b) the off-site location of LTS-CR, (c) continued academic enrollment and credit fulfillment supervised by certified staff, (d) individualized counseling tailored to the student's offense and needs, and (e) a robust transition plan to help the student reenter school with support once the suspension was completed. With these characteristics in place, District 1 saw 64 (30 percent) of 212 students with a suspension transfer or drop out of school. Of the 64 who did not graduate, 24 (38 percent) did not participate in LTS-CR. In fact, of the 24 students who did not participate in LTS-CR, only 7 (29 percent) graduated once the suspension was served.

In District 2, which did not have an LTS-CR program in place, 12 (52 percent) of the 23 suspended students did not graduate. Another 6 students (26 percent) were behind at least one grade level and would not graduate with their cohort without extraordinary measures or interventions. The findings suggest that LTS-CR programs, such as the one implemented by District 1, abate the serious negative academic, social–emotional, and antisocial behavior that results from, and may have led to, exclusionary suspensions.

**School climate as a contributing factor toward exclusionary suspension.** This study did not address variables related to existing research into school climate and teachers' attitudes, competence, and empowerment as factors in the increase of exclusionary suspensions (Gregory, 2009). Gregory's (2009) research pointed to the use of short term (less than 10 day) suspensions for classroom misbehaviors and disruptions. My study addressed long-term suspensions and its

findings should not be extrapolated to short-term suspensions. Gregory, along with Hemphill (2014), suggested that when schools rely on exclusionary suspensions to address minor student behaviors, the outcome is an increase in the use of exclusionary suspensions and an erosion of fair and consistent disciplinary actions. Schools should address the underlying causes of the disruptions through better supervision, building relationships with students, counseling, and socialization strategies, to prevent the recurrence of student misbehaviors.

With the research of Gregory (2009) and Hemphill (2014) in mind, it is important to note that the LTS-CR programs are designed for students suspended for more than 10 days. Gregory's and Hemphill's research into short-term suspensions showed that it was ineffective at curbing student misbehavior and resulted in more suspensions for longer periods of time. My research does show a significant increase in graduation for students who participate in an LTS-CR program. In cases of minor infractions, the LTS-CR model should not be used. Schools may look to this model to craft their own non-exclusionary programs for short-term suspensions that do not remove the student from school, address the underlying behaviors through training or counseling, and effectively address academic concerns through certified teacher supervision. Once schools develop short-term programs, more research can be conducted to examine the effectiveness of such programs at improving student behavior, achievement, and graduation rates.

**Implicit gender, racial, and socioeconomic bias in exclusionary suspensions.** Gender, race, and socioeconomic bias were all variables in my study. According to Mendez (2003) and Skiba (2014b), students belonging to racial minorities or who had low-socioeconomic-status backgrounds were the subject of disproportionate suspensions and were overrepresented in school suspensions. I did not find any correlation between the gender, race, or free- or reduced-

lunch status of suspended students and graduation. For District 1, the data in **Error! Reference source not found.** shows that the school population was 82 percent White and 5.5 percent Black. The district's suspension data shows a suspension rate of 72 percent for White students and 18 percent for Black students. This supports Mendez's claim that there is a disproportionality to the suspension of Black students compared to their White counterparts. More information would be needed to conclude that this was due to implicit bias. In all other populations, as well as in District 2, there was no disproportionality according to race or socioeconomic status. Deeper statistical analysis would be required to demonstrate a correlation. I did compare the graduation rates of White students to those of students of another race or ethnicity, but I found no statistically significant difference in the graduation rates of suspended students based on race, gender, or socioeconomic status.

**Impact of zero tolerance policies on exclusionary suspensions.** According to Skiba (2014a) and Gregory (2009), the idea of zero tolerance for minor offenses has increased the number of exclusionary suspensions. I looked at long-term suspensions (longer than 10 days). The percentage of long-term suspensions in any of the 5 years examined in this study was never over 0.5 percent. From the perspective of long-term suspensions in the two participating districts, my study did not show evidence of an increase or the phenomenon of minor offenses becoming worthy of exclusionary suspensions. For students suspended for 11 days or more, the list of offenses offered by Districts 1 and 2 did not include any minor offenses as defined by each district's school board's policies.

## Limitations

Despite the importance of these findings, there were several limitations to my analysis and the data that I was able to collect. Future research will need to address these limitations.

The first limitation was that the actual data collected by school district administrators about suspensions and the structure of most student information systems often have redundancies and missing information that must be addressed by trained individuals in the district. Another data limitation was the absence of qualitative data, especially survey data from suspended students and their parents. Having students use a Likert scale to indicate their views on the effectiveness of the program would move the research from a quantitative to a mixed-method or qualitative study, because this study is over five previous years, future study could benefit from surveying students at the time of their suspension and conducting follow up interviews with them through their high school tenure. Furthermore, data linked to individuals instead of coming from student information systems would allow researchers to look at the backgrounds of suspended students to understand some of the contributing factors related to long-term suspensions.

Another limitation was the demographics of the school districts studied. A major factor in the choice of these two school districts was the ability to get consent for the use of the data because I had worked for both districts at the time of the study. Although the data collected were sufficient to support the conclusions, more variation from urban, suburban, and rural districts would have yielded even stronger evidence from which to draw conclusions.

A final limitation of the study was the policy differences school districts have in meting out long-term suspensions. Zero-tolerance districts, like District 1 in this study, suspend a student for a minimum of 45 days for a first major offense, whether the student has a discipline record or not. Other districts, like District 2, only suspend students long-term on the second offense or if they have a long record of offenses prior to a major incident. These policy differences reduce the clarity of the results.

**Recommendations for Future Research**

This study raises important questions for future research. Because the findings suggest a potential relationship between participation in LTS-CR programs and graduation, it is recommended to continue to probe, using qualitative data, how students perceive the punishment and the effectiveness of the program. Qualitative data would also permit investigation of which program structures are effective so that they could be replicated to great effect in other school districts. Another important and predictable outcome of my study is the finding that reading proficiency is correlated with the graduation of students in long-term suspensions. It would also be beneficial for future study to look at targeted reading interventions for students on long-term suspensions who are not reading at proficiency to correlate reading interventions with a decrease in misbehavior and an increase in graduation.

Future exploration into the question of factors that lead to long-term suspensions, and the most effective duration of a long-term suspension, would help school district officials and school boards establish new policies regarding long-term suspensions that could prevent student suspensions by identifying risk factors in students and addressing those factors through guidance and social-support programs. Finally, research could be conducted to develop better strategies for short-term suspensions that would reduce the need for exclusionary suspensions and help schools vary the way students are punished in the future.

In summary, the results of my study contribute to an important story about school discipline and the relationship between student participation in LTS-CR programs and graduation. I found that participation in LTS-CR programs was associated with an increase in graduation. Reading proficiency was positively correlated with graduation, too. The results of my study join existing evidence of the negative effects of exclusionary suspensions due to

implicit bias, wrong-headed zero-tolerance policies, poor school climate, and ineffective discipline strategies. More fundamentally, my findings suggest an alternative tool to schools by supporting the effectiveness of LTS-CR programs.

My study addressed a critical aspect of school suspensions that many researchers have neglected: If there is a need for suspension because it is mandated by states, how can school district administrators adhere to these mandates but improve student success and behavior at the same time? I investigated the effectiveness of an LTS-CR program implemented by one school district to decrease its student dropout rate by comparing the district to a neighboring school district that did not implement such a system. The study was designed to indicate whether there was a statistically significant association between use of an LTS-CR system and student dropout rate. The implication of the findings in this study are that school districts could effectively create programs that will hold students accountable and follow mandatory suspension policies while addressing academic and social emotional needs for these students using an LTS-CR program.

## References

American Academy of Pediatrics Committee on School Health. (2003). Out-of-school suspension and expulsion. *Pediatrics, 112*, 1206–PP.

Arcia, E. (2006). Achievement and enrollment status of suspended students: Outcomes in a large, multicultural school district. *Education and Urban Society, 38*(3), 359–PP.

Costenbader, V. (1998). School suspension. *Journal of School Psychology, 36*(1), 59–82.

Dupper, D. R. (2009). Reducing out-of-school suspensions: Practice guidelines for school social workers. *Children & Schools, 31*(1), 6–14.

Freudenberg, N., & Ruglis, J. (2007). Peer reviewed: Reframing school dropout as a public health issue. *Preventing chronic disease, 4*(4).

Gottfredson, D. C., Gottfredson, C. D., & Hybl, L. G. (1993). Managing adolescent behavior: A multiyear, multischool study. *American Educational Research Journal, 30*(1), 179–PP.

Gregory, A. (2009). The promise of restorative practices to transform teacher-student relationships and achieve equity in school discipline. *Journal of Educational and Psychological Consultation, 26*(4), 325–353.

Hargreaves, J. (2009). The impact of school suspensions: A student wellbeing issue. *ACHPER Australia Healthy Lifestyles Journal, 56*(3–4), 5–PP.

Hemphill, S. A. (2006). The effect of school suspensions and arrests on subsequent adolescent antisocial behavior in Australia and the United States. *Journal of Adolescent Health, 39*, 736–744.

Hemphill, S. A. (2014). Student and school factors associated with school suspension: A multilevel analysis of students in Victoria, Australia and Washington State, United States. *Children and Youth Services Review, 36*, 187–194.

Hoffman, S. (2014). Zero benefit estimating the effect of zero tolerance discipline polices on racial disparities in school discipline. *Educational Policy*, *28*(1), 69–95.

Kraetzer, C. M. (2002). Does the Missouri Safe Schools Act Past the Test-Expelling Disruptive Students to Keep Missouri's Schools Safe. *Mo. L. REv.*, *67*, 123.

Kupchik, A. (2015). Discipline and participation: The long-term effects of suspension and school security on the political and civic engagement of youth. *Youth & Society*, *47*(1), 95–124.

Lamont, J. H. (2015). Out-of-school suspension and expulsion. *Pediatrics*, *131*, e1000–e1007.

Mendez, L. M. R. (2003). Who gets suspended from school and why: A demographic analysis of schools and disciplinary infractions in a large school district. *Education & Treatment of Children*, *26*(1), 30–PP.

Morris, R. C. (2003). Designing an effective in-school suspension program. *The Clearing House*, *76*(3), 156–159.

Morrison, G. M., & Anthony, S. (2001). An examination of the disciplinary histories and the individual and educational characteristics of students who participate in an in-school suspension program. *Education and Treatment of Children*, *24*(3), 276–293.

Skiba, R. J. (2014a). The failure of zero tolerance. *Reclaiming Children and Youth*, *22*(4), 27–PP.

Skiba, R. J. (2014b). Parsing disciplinary disproportionality: Contributions of infraction, student, and school characteristics to out-of-school suspension and expulsion. *American Educational Research Journal*, *51*, 640–670.

Townsend, B. L. (2000). The disproportionate discipline of African American learners: Reducing school suspensions and expulsions. *Exceptional Children*, *66*(3), 381–391.

Wilson, H. (2014). Turning off the school-to-prison pipeline. *Reclaiming Children and Youth*, *23*(1), 49–PP.

## Appendix A

<table>
<tr><th colspan="3">Long-Term Suspension: Credit Recovery (LTS: CR) Agreement</th></tr>
<tr><td rowspan="4">Information</td><td>Student:</td><td>Date of Violation:</td></tr>
<tr><td>Building:</td><td>Suspending Principal:</td></tr>
<tr><td colspan="2">Policy Violation: Drug Offense</td></tr>
<tr><td colspan="2">Long-Term Suspension: Credit Recovery<br>Start Date: End Date:<br>in lieu of Board Policy Out of School Suspension<br>Start Date: End Date:</td></tr>
<tr><td>Purpose</td><td colspan="2">The purpose of the Long Term Suspension: Credit Recovery Program is to provide an educational opportunity for students who have been out of school suspended from the school district for 10 to 180 days. Though students remain suspended from the district, they have the opportunity to earn academic credit in a structured setting.</td></tr>
<tr><td>Rules</td><td colspan="2">• Students are not allowed to have:<br>o Food or drink in the classroom.<br>o Cell Phones (including phone calls and text messages)<br>o Electronic Devices (including, but not limited to, iPods, MP3s, PSPs)<br>• Students are not permitted to talk to anyone without permission.<br>• Students are not permitted to work on projects together without permission.<br>• Students are to stay in their assigned seats at all times.<br>• Students are responsible for their assigned laptop computer.<br>• Students are to report any damage to their computer immediately.<br>• Students are not to use e-mail or internet for personal use.<br>• Students are to remain in the classroom for the entire duration of class.<br>• Students are not to enter any _____Public School building with the exception of the LTS: CR Program Building.<br>• Students may not attend any school sponsored event including, but not limited to, home and away sporting events, club/group meetings, school dances, etc.<br>• Students riding the bus may not be dropped off at any secondary location other than their parent/guardian's dwelling.<br>• Senior Students who finish coursework may be required to finish LTS: CR time obligation in order to receive coursework credit.<br>• Students who attend the Career Center will not attend or be enrolled there during the long-term suspension period.<br>• Students who move outside of the _____School District will be dismissed from the LTS: CR program.<br>• All rules and expectations outlined in the _____ High School Student Handbook will continue to apply, except where superseded by any of the above rules.</td></tr>
</table>

| | |
|---|---|
| Violation of Program Rules | • Violation of program rules can result in a written warning, dismissal from the program for the remainder of the day or dismissal from the program for the remainder of the Board Policy Out of School Suspension.<br>  ◦ A violation following a written warning will result in dismissal from the program for the remainder of the day.<br>  ◦ A violation following a dismissal from the program for the remainder of the day will result in dismissal from the program for the remainder of the Board Policy Out of School Suspension.<br>• Any food or drink brought into the classroom will be disposed of.<br>• Any cell phones or electronic devices used in the classroom will be confiscated and returned to the student's parent/guardian.<br>• Any damage to the student's assigned laptop computer will be the financial responsibility of the student and parent/guardian<br>• Entering any _____Public School building, being on any _____ Public School property, other than the LTS:CR Program building, or attending any school sponsored event may result in dismissal from the program for the remainder of suspension and additional school discipline.<br>• Student's, whose behavior results in loss of bus privileges, will be responsible for their own transportation for the remainder of the suspension.<br>• First unexcused absence results in a written warning, second results in dismissal from the program for the remainder of suspension. The third excused absence will result in a written warning and possible dismissal, any additional will result in possible dismissal from the program for the remainder of suspension.<br>• The fourth excused tardy or second unexcused tardy results in a written warning and possible dismissal, any additional will result in possible dismissal from the program for the remainder of suspension.<br>• A positive drug test may result in, but not be limited to, dismissal from the Credit Recovery Program and additional appropriate school discipline for example possession of controlled substances or attendance under the influence. Law violations shall also be reported to the appropriate law enforcement agencies.<br>• Dismissal from the LTS:CR Program for the remainder of suspension the student will not be given credit for work completed. |
| Expectations | Parent/Guardian are expected to:<br>• Report an absence or tardy by 7:45 am to _____ at 816-628-4585.<br>Students are expected to:<br>• Be on time.<br>• Use class time efficiently.<br>• Make progress on assigned courses.<br>• Meet course deadlines. |

| | |
|---|---|
| Program Obligations | ☐ Request for Student Assistance Program (SAP) support<br>☐ Weekly Life Skills Groups: During Term of Suspension<br>☐ Monthly meetings with Student Advocate:<br>☐ Weekly Chemical Health Classes: 12 Weeks<br>☐ On-site Drug Testing to begin on:<br>with a negative test result by:<br>☐ Weekly Behavior Management Classes: 12 Weeks<br>☐ Other: |
| Program Obligations Description | Life Skills Groups<br>• The group will meet weekly and focus on physical, social and emotional needs.<br>• Sessions will be determined based upon LTS:CR student need.<br>Student Advocate Meetings<br>• Monthly meeting to further develop knowledge and skills learned through program classes and groups.<br>• Student Advocate will track completion of program obligations.<br>Chemical Health Class<br>• Twelve Sessions facilitated by a Northland Dependency Services certified Substance Abuse Counselor to increase knowledge and understand of Chemical Health.<br>• Sessions Include: Effects of Alcohol, Overview of Drugs, Perceptions of Drug Use, Cycle of Involvement, Consequences and Cost of Use, Decision Making, Effects on the Brain, Impact of Drug Use on People Around Us, Facts, Binge Drinking, Peer Pressure, and Identifying Need for Change<br>On-site Drug Testing<br>• With written consent from the parent or guardian of a student under the age of 18 years<br>Behavior Management Class<br>• Twelve Sessions which address issues of anger management, conflict resolution, and healthy boundaries.<br>• Sessions Include: What is Anger, Warning Signs, Primary/Secondary Emotions, Thinking Ahead, Button Pushing, Expressing Anger, Harassment, Problem Solving, Communication, Beliefs & Attitudes, Stress Reduction, Negotiating |
| Transition Plan | • Students who have not completed the violation specific program obligation(s) prior to returning to their regular education setting will be excused from class to complete the obligation(s). Students will be responsible to complete any work missed while attending these required sessions.<br>• Prior to integration back into the regular education setting; a Transition Plan will be completed by the student and Student Advocate. The Transition Plan will consist of:<br>o Community-Based Services (if appropriate)<br>o Monthly meetings with LTS: CR Student Advocate<br>o Tutoring<br>o Continued Administrative Support (if part of the original LTS: CR Contract)<br>• Upon completion of the LTS: CR Transition Plan, all individuals included in the plan will be provided a copy. |

| | | |
|---|---|---|
| Contacts | Superintendent Designee:<br>Program Director: | Suspending Principal:<br>• Click here to enter text.<br>Guidance Counselor:<br>• Click here to enter text.<br>Student Advocate: |
| Participation Agreement | I understand participation in the Long-Term Suspension: Credit Recovery Program is voluntary. However, failure to comply with the rules, obligations or transition plan can result in serving the remainder of this long-term suspension out of school. Participation in the LTS-CR program merely stays the imposition of the long-term suspension recommended or imposed so long as the student abides by the terms and conditions of the program. Execution of this agreement acknowledges acceptance of the disciplinary decision of the District and waives any right of appeal of the Superintendents' decision including a hearing before the Board of Education.<br><br>Parent/Guardian: _____ Date: _____<br><br>Student: _____ Date: _____ | |
| Individuals in Attendance | Name:<br>Click here to enter text.<br>Click here to enter text.<br>Click here to enter text.<br>Click here to enter text.<br>Click here to enter text. | Position and/or agency:<br>Student<br>Parent or Guardian<br>Superintendent Designee<br>Suspending Principal<br>Click here to enter text. |
| Meeting Notes | • | |

# Appendix B

## Adult Informed Consent Statement

GRADUATION RATES AND LONG-TERM SUSPENSION RECOVERY PROGRAMS

INTRODUCTION

The Department of Educational Leadership and Policy Studies at the University of Kansas supports the practice of protection for human subjects participating in research. The following information is provided for you to decide whether you wish to participate in the present study. You may refuse to sign this form and not participate in this study. You should be aware that even if you agree to participate, you are free to withdraw at any time. If you do withdraw from this study, it will not affect your relationship with this unit, the services it may provide to you, or the University of Kansas.

PURPOSE OF THE STUDY

How does placing students in a long-term suspension credit recovery system relate to the decrease of the number of dropouts in a school district among long term suspended students?

PROCEDURES

1. Determine the PowerSchool codes necessary to get the correct information from school districts.
2. Compose letter to each school district and request access to the needed information.
3. Receive district data.
4. Review data and look for anomalies and possible data errors or extreme outliers.
5. Compile data into excel spreadsheet for analysis
6. Combine student analysis from both districts and scrub the data to standardize all variables in preparation for input into the SPSS program.
7. Run single and multiple regression analysis in SPSS.
8. Determine if there is statistical significance for the student's graduation rates if they were enrolled in LTS-CR.
9. Determine if there is statistical significance for the student's graduation rates for each of the variables in the multiple regression.
10. Analyze and report whether the statistical significance of both models.
11. Conclude the study.

The goal is to use anonymous student data from PowerSchool to look for a correlation between several factors in students who have been long-term suspended from 2012 until 2017. Included in this data would be student gender, race, transfer or graduation status, length of suspension,

reason or core data code for suspension, participation in LTS-CR program, free and reduced lunch status, 3rd grade reading MAP level, and Communication Arts II EOC proficiency level. No identifiable student records will be used and district data will be pooled so that district data will be anonymous and confidential.

RISKS

There are no risks associated with participation in this study.

BENEFITS

The anticipated benefits of this study include identifying another possible identifier for at-risk students. If a relation can be linked to graduation rates and long-term suspension programming this might be an area where schools can develop programs that provide intervention and service to students that improve chances of graduation and still hold students accountable for major offenses.

PAYMENT TO PARTICIPANTS

There is no compensation associated with participation in this study.

PARTICIPANT CONFIDENTIALITY

The name of your school district will not be associated in any publication or presentation with the information collected about you or with the research findings from this study. Instead, the researcher(s) will use a study number or a pseudonym rather than your name. Your identifiable information will not be shared unless (a) it is required by law or university policy, or (b) you give written permission.

Permission granted on this date to use and disclose your information remains in effect indefinitely. By signing this form, you give permission for the use and disclosure of your information for purposes of this study at any time in the future.

REFUSAL TO SIGN CONSENT AND AUTHORIZATION

You are not required to sign this Consent and Authorization form and you may refuse to do so without affecting your right to any services you are receiving or may receive from the University of Kansas or to participate in any programs or events of the University of Kansas. However, if you refuse to sign, you cannot participate in this study.

CANCELLING THIS CONSENT AND AUTHORIZATION

Data will be collected upon your approval with the help of your district's PowerSchool Administrator. You may withdraw your consent to participate in this study at any time. You also have the right to cancel your permission to use and disclose further information collected about you, in writing, at any time, by sending your request by email to: brttcffmn@icloud.com or a written request to: *Brett Coffman, 600 NW Edgewood Dr., Lee's Summit, MO, 64081*

If you cancel permission to use your information, the researchers will stop collecting additional information about you. However, the research team may use and disclose information that was gathered before they received your cancellation, as described above.

QUESTIONS ABOUT PARTICIPATION

Questions about procedures should be directed to the researcher(s) listed at the end of this consent form.

PARTICIPANT CERTIFICATION:

I have read this Consent and Authorization form. I have had the opportunity to ask, and I have received answers to, any questions I had regarding the study. I understand that if I have any additional questions about my rights as a research participant, I may call (785) 864-7429 or (785) 864-7385, write the Human Research Protection Program (HRPP), University of Kansas, 2385 Irving Hill Road, Lawrence, Kansas 66045-7568, or email irb@ku.edu.

I agree to take part in this study as a research participant. By my signature I affirm that I am at least 18 years old and that I have received a copy of this Consent and Authorization form.

Christopher B. Hand — Type/Print Participant's Name

7/27/18 — Date

Participant's Signature

Researcher Contact Information

Brett Coffman
Principal Investigator
ELPS Dept.
600 NW Edgewood Dr.
Lee's Summit, MO 64081
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tadeluca@ku.edu

# Appendix C

## Adult Informed Consent Statement

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REFUSAL TO SIGN CONSENT AND AUTHORIZATION

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Jeff Morrison — Type/Print Participant's Name

7/23/18 — Date

Participant's Signature

Researcher Contact Information

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